A Contribution to the knowledge of *Phytonomus meles* F. (Col., Curculionidae) in Britain

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Regarding this weevil—always very scarce with us, as far as records testify—Canon Fowler's statement that "the species appears to be very imperfectly known" (1891: 236) remains, for this country, virtually as true to-day as when it was written. As usual in such cases, it was (like the still rarer *P. elongatus* Payk.) omitted by the late Dr Joy from his *Practical Handbook of British Beetles* (1932)—though oddly enough he included *P. arundinis* Payk., the rarest of all and perhaps long extinct. In reality, however, *P. meles* is quite distinctive, and not difficult to recognise once its appearance is familiar. It will be well, therefore, to set forth its characters more fully than hitherto for the benefit of coleopterists, before bringing the records as far as possible up to date. The former may be most conveniently done by tabular comparison with that species to which, in our fauna, it comes nearest and which sometimes does duty for it in collections—namely the rather common *P. plantaginis* Deg.

(Pronotum very obviously transverse, strongly dilated at sides and strongly contracted to base, unlike all other British spp.; elytra with scales bifurcate, and with raised setae mostly towards apex; L. 4-5 mm.)

meles	*plantaginis*
Elytra on alternate intervals towards sides and apex more or less lineated, or tessellated with small light spots, but without large dark patches or other conspicuous marks.	Elytra with large dark patches at sides behind and small ones at base, but if immature, uniformly pale rufous or ochreous-brown without distinct tessellation or lineation.
Head between eyes narrow, much less than greatest diameter of eye seen from above.	Head between eyes wider, little less than greatest diameter of eye seen from above.
Rostrum in ♂ as long as pronotum, in ♀ longer; thinly haired, very shiny, with at least traces of a lateral furrow or fine ridges (may be obscured by the hairs).	Rostrum about $^1/_4$ shorter than pronotum alone (♂ and ♀), thickly haired and thus duller, with no trace of a lateral furrow or ridges.
Antennae with scape longer, apical thickening smaller and less abrupt; segment I of funicle in ♂ clearly longer than 2 (in ♀ less so).	Antennae with scape shorter (more so in ♀), apical thickening larger and more abrupt; segment I of funicle subequal in length to 2.
Pronotum widest a little behind middle, sides scarcely sinuate before hind angles	Pronotum widest a little, or plainly, before middle, sides sinuate just before hind angles which thus tend to be more marked.

which are very obtuse or effaced.

Scales on elytra divided nearly to their bases like an inverted V, the arms hair-like, plainly diverging; more evenly but less densely covering the surface; those on the pronotal disc simple, fine, and hair-like.

Setae of elytra weaker, less outstanding, less numerous.

Scales on elytra broader, the two points only as long as the body of the scale, scarcely diverging (but when immature, scales appear hair-like throughout), thickly covering the pale areas; those on pronotum largely as above, but the broader ones of the mid-line short-pointed.

Setae of elytra stronger, more outstanding, more numerous.

The different form of the scales in the two species, as regards both pronotum and elytra, is sufficient to separate them decisively under a moderate magnification—e.g., about ×40-50. (Scale characters are important in this genus; Reitter (p. 101), Hoffmann (p. 572), and Hansen (p. 108) figure the various types). A warning, however, is necessary here. Immaturely coloured examples of *plantaginis*—far from uncommon—not only lack the pattern characteristic of mature individuals but also have the scales undeveloped, appearing simple and hair-like; and on both features thus somewhat more resemble *meles*, for which they have been mistaken. Careful attention to the various characters, however, will prevent such errors.

The colour-tone of the scales varies in both species; in *plantaginis* it can be decidedly green, though more often ashy-grey to brown. My pair of *meles* from Surrey both have a strong coppery cast to the elytral scales, and the pronotal scale-hairs are iridescent and present a beautiful crimson glow when the light strikes them at a certain angle. In the Harwood specimen, however, a grey tint prevails. Fowler's "greyish or yellowish-brown" sufficiently describes the general impression.

I have not examined the genitalia of *P. meles*, which may well be somewhat characteristic, but they should scarcely ever be needed for identification.

Most of what Fowler writes concerning this species (pp. 231, 236) appears correct, except for his statement (p. 236) "second joint of funiculus not much longer than third joint" which may be rectified by deleting the word "not". He describes the rostrum as "nearly straight", but this rather overstates the case, it being merely a little less noticeably curved than in the allied species. What is far more puzzling, Hoffmann (p. 583)[1] ascribes the longer rostrum to the male, remarking (justly) that this is the exact opposite of the usual condition in the family. I would certainly agree as to the differing rostral lengths; yet on the other hand, from my material, I cannot agree that Hoffmann has allotted them to the right sexes, and, since he has correctly recognised the latter, can

only conclude that his attribution as above is erroneous—especially as it is not supported by other authors.

Hansen (1965: III) figures the difference in pronotal shape between *meles* and *plantaginis*, but that relating to the base is not always marked in British specimens of the latter.

[1]Hoffman (*l.c.*) reverts to the name *Hypera* for the genus, formerly in wide use and in all British literature up to Joy (1932); giving seemingly valid reasons, with which, however, I am not here concerned. Further, he employs none of the almost unused names given for some of the species by Kloet & Hincks (1945: 214), and which are not accepted on the Continent. His names for the British species are as given by Joy (1932) except *zoilus* Scop. (1763) for the large species long known as *punctatus* F. (*austriacus* Schrk. in Kloet & Hincks). However, the two names *posticus* Gyll. and *venustus* F., as used by the last-named, must probably be adopted; though Hansen, writing 11 years later, still uses the generally accepted *variabilis* Hbst. and *trilineatus* Marsh. respectively for them, his nomenclature being wholly identical with Joy's for our species. I am strongly of the opinion that we should adopt, here and elsewhere, those names which a consensus of Continental usage—as far as it may be had—would dictate.

The foodplants of *P. meles* are typical of its genus: species of *Trifolium* (clover), *Medicago* (lucerne, medick), and *Lotus* (trefoil) are cited on the Continent. Despite its name, the same would seem to be broadly true of *P. plantaginis* (cf. Hansen, p. 119).

The only[2] published records of *Phytonomus meles* in Britain that I have seen are given by Fowler (1891: 236):—"Mickle-

[2]The *Hypera trifolii* Hbst. recorded by Stephens (*Ill. Brit. Ent.*, **4**: 99) as "not infrequent within the metropolitan district; also found in Norfolk and Suffolk" *may* indeed—as some points in his description suggest—have been *P. meles*, with which Herbst's insect is believed to be synonymous.

ham (Power); received from Ross years ago (S. Stevens); Selby, near York, by sweeping a river bank in September (W. C. Hey)"; by Donisthorpe (in Fowler & Donisthorpe, 1913; 308) who adds "Yarmouth and Foxley Wood (Edwards)"—both localities in Norfolk—; and by Bedwell (1909: 164) who reports his capture of "what I am told is probably *Hypera meles* F." by sweeping on the chalk downs near his house at Coulsdon, Surrey, early in July 1908. Bedwell's specimen is most likely genuine, though confirmation is desirable; its identity was probably suggested by E. A. Newbery. I have inspected the material standing over the name *meles* in the Power collection and found that the two examples from Mickleham, Surrey (see above) are no more than the deceptive pale (doubtless immature) form of *plantaginis* already referred to as liable to cause confusion; they have now been separated and labelled as such. Power's Surrey record of *meles* must therefore be deleted. The other three are old specimens with various labels but no locality, and are true *meles*.

There is in the Hope Dept., Oxford, a specimen (which I have examined) taken by P. Harwood at Wicken Fen, Cambs. (15.v.42). According to Donisthorpe (MS locality list), T. Hudson Beare swept a weevil of this genus from a patch of lucerne

in flower on the way to Wicken Fen from the village (18.ix.22) which he (Beare) made out to be the present species, but Donisthorpe told me he always thought it was only *P. suspiciosus* (i.e. *pedestris* Payk.). In view of Harwood's specimen, however, that opinion is perhaps questionable. Donisthorpe (MS list) adds for *meles*:—"By sweeping in Stubby Copse, New Forest, June 17 (J. J. Walker); several on Crymlyn Burrows (Swansea List)". Concerning Edwards's Yarmouth example he notes that it occurred under *Ononis* in August.

Finally I can add two further records for Surrey—the latest British captures known to me. My interest in the species was first aroused on finding an unfamiliar-looking *Phytonomus,* set aside from the rest of the genus, in the late H. Dinnage's collection which I had acquired, and which proved to be a male *P. meles* in very fair order; it was labelled "Guildford 5.46". Later I had the good fortune to take a specimen at Oxshott Heath by sweeping heather (17.ix.58)—a female in fine condition. Not far off was a moister spot where grew red clover and large birdsfoot-trefoil, from which it seems that the beetle may have strayed, but all attempts to obtain further specimens were fruitless.

Whilst it is true that (as already pointed out) forms of the variable *P. plantaginis* are to be found standing as *P. meles* in collections, the reverse mistake is just as likely to occur, since many collectors name their insects from Joy's book and *meles* would there at once key out to *plantaginis* with at most a slight doubt. This renders it likely that some genuine captures of the former have escaped the records — especially perhaps as the species is common in (e.g.) northern France and widespread in Denmark.

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